American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O Fortunatos nimium sua si bona norint
"Agricolas." . . . . *Virg.*

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Legislative, Agricultural Conversations.

We copy the subjointed Report of the Sixth Agricultural Conversation held by the Members of the Massachusetts Legislature, from the *New England Farmer*. The subject discussed is one of great importance, though much neglected in this country. To her Root Crops, England is as much, if not more indebted than to any other thing for her present agricultural prosperity, her improved husbandry, and to the fertility of her soil. Indeed, it may be said that a single root—the turnip—has wrought an agricultural revolution in the system of farming pursued there, and enriched the nation to the amount of countless millions. In view of this fact, we feel it our duty to call the attention of our readers to the importance of increasing their culture of roots.—So far at least as to enable them to feed their milch cows and fatten a few beeves.

Sixth Agricultural Meeting at the State House.

February 13.

The subject under discussion was "Root Crops," and a deep interest was manifested in the debate throughout the evening. Mr. *Quincy* presided. The meeting was very well attended. The editor of this paper opened the meeting with the following remarks :

The subject of Root Crops is a very prolific one, and might well engage our attention, with profit and interest, for many evenings. The cultivation of roots is of great importance in agriculture. Roots which belong to field culture, are, potatoes, carrots, turnips, beets and parsnips. First, the potato. This valuable vegetable is ascertained to be a native of South America, having been found wild both in Buenos Ayres and Chili. The potato was introduced into England, by Sir Walter Raleigh, in 1586, who procured the root from Virginia, and were first planted by him on his estate of Youghall, near Cork. It is said to have been cherished and cultivated in Ireland before its value was known in England. Gerarde, a celebrated English botanist, had this root in his garden in 1597, under the name of Buttata Virginiana, recommending it to be eaten as a delicate dish, and not as a common food. Parkinson mentions that the tubers were roasted and steeped in sack and sugar, or baked with marrow and spices, and even preserved and candied by the comfit makers. In England they were received with much prejudice. More than one hundred years after its introduction, the potato was spoken slightingly of by numerous writers. But notwithstanding the prejudice entertained against them, their great value was gradually understood. It is now considered that the potato, as an article of human food, is next in value to corn or wheat, or by some considered of equal importance.

We must look upon the introduction of the potato as a great blessing to mankind. It has, no doubt, been the cause of preventing famine ; indeed, when this root is cultivated in connection with other crops, we may say almost with a certainty that a famine cannot exist. Most devoutly, then, should we thank God for it, and at the same time, let us ask—How shall we cultivate it to the best advantage? in what soil? shall we plant the tubers or cut them in pieces? whether in hills or drills? Is it necessary to raise new varieties from seed? do the old varieties degenerate? How does it compare with carrots and other roots in value for stock? These are questions, gentlemen, which I shall leave for you to discuss. I will only remark that the cultivation of the potato is too often done in the most slovenly manner. It is not uncommon in the month of August, to see fields of this precious root, so overrun with tall luxuriant weeds, that a person would hardly know that potatoes had been planted, unless they took the pains to clear away the weeds. No wonder that a meagre crop of 75 to 100 bushels per acre, is all that is too frequently realized ; whereas when due attention is given, proper manures, clean cultivation, on suitable soil, the husbandman may be rewarded with the ample crop of 400 to 500 bushels, or even more.

Potatoes seem to flourish best on new land, but grow well on almost any kind of soil, provided it is not very clayey or wet. Some of the largest crops on record have been raised on reclaimed bogs and peat. The farther we proceed eastward and northward, the potato seems to improve in quality. A cold season or climate, appears to be most congenial to the perfection of the root. Very hot, and continued dry weather in July and August is very prejudicial.

Second, the *Carrot*.—This valuable root is said to be a native of Great Britain, and long cultivated as a garden plant. Its use for culinary purposes is well known, but as food for cattle, it has not received that attention among our farmers which its value demands. We are satisfied, by many years' experience, that the carrot is one of the most valuable roots for agricultural purposes known among us, and in our climate, worthy of more consideration even than the turnip. In New England, it can be brought to as great perfection, and to yield as large a crop, as in any other country. The varieties used in field culture, are the Long Orange, Altringham, and White Belgian. The last variety is of recent introduction, and will no doubt produce the largest quantity per acre. It has one peculiarity in which it differs from the other varieties : it grows partly above ground, like the beet, and assumes a greenish cast where exposed to the sun and air, but below ground, is of a clear white. I doubt whether the extra quantity will compensate for the deficiency of quality, in comparing it with the Long Orange. The Altringham is a coarse-growing variety of a pale yellow, producing more to the acre than the Long Orange, but yielding less in point of richness. The Long Orange to me is preferable, and this variety has received my particular attention for many years. Our horses and cows have been liberally supplied with these and other roots. To horses, particularly, carrots are highly serviceable : they require much less grain when fed on them at the rate of one peck per day. They give the hair a peculiar smooth and glossy appearance. I have found them to have a salutary effect upon a horse that had the dangerous defect of stumbling : the difficulty was nearly overcome by feeding a peck of carrots in the evening, with a reduced quantity of meal with his cut feed.

The objection often made to this crop, that the expense exceeds the profit, is without foundation. Carrots can be raised with much less expense than potatoes ; and a bushel of carrots is worth as much or more than a bushel of potatoes, for a horse, or any other animal.

The soil best adapted for carrots, is a deep, rich loam, free from gravel or sand. The manure should be well decomposed and fine ; the ground pulverized deeply, and the manure well incorporated by plowing or harrowing. When the young plants show themselves distinctly, they should be weeded. For this purpose, I use the scruffio or Dutch hoe, which may be worked to within half an inch of the plants, if they have been planted in straight lines : this cuts off the weeds just below the surface, and the sun utterly destrys them. It will then be necessary to go over the field and pull out the weeds in the rows with the fingers. Carrots, as well as other roots, are planted on ridges with success, and perhaps with less labor : we have sometimes raised them in this way.

Third, the *Turnip*.—This plant is a native of Britain, but in its wild state, is said not to be recognized by ordinary observers, from wild mustard. The turnip was cultivated for cattle by the Romans, and has been used for the same purpose from time immemorial in Germany and the low countries. The introduction of improved turnip culture into English husbandry, is comparatively of modern origin, and will not date back farther than 60 or 80 years. It has occasioned a great revolution in the rural art. It has been observed, that turnips and clover are the two main pillars of the best courses of British husbandry.

The value of the turnip crop in New England, however, cannot compare with its value in Old England, owing to the great difference in the climate. In England, we are informed, that in consequence of the winters being more moderate than ours, the turnip crop is mostly consumed on the ground : the fields are divided into folds, by a wattled, moveable fence, and the sheep and cattle are turned in, and when the crop is consumed in one fold, the fence is removed to another part of the field. All the excrements are thus left on the field, plowed in, and wheat sown, thus saving the expense of harvesting the crop and carting the manure. The climate too, of England is more favorable for the growth of the turnip than our own, it being colder in summer and much more humid, which is more congenial to the turnip family than our hot, arid summers.

The turnip, however, should not be underrated here, as the crop may be raised to good advantage for cattle and sheep, even here in New England.

Turnips should not be sown until the middle of July to the middle of August : their growth will be made mostly after the cold nights of September. They will flourish on lighter soil than is required for carrots. When sown broadcast among the corn at the last hoeing, a common custom, they are so shaded by the corn, the produce is generally small. The finest looking field of turnips I ever saw, was on the farm of the Hon. Daniel Webster, at Marshfield : they were cultivated in drills, and perfectly free of weeds. This mode is no doubt the best.

The varieties of turnip cultivated in England for stock, are very large, which are sown according to soil or the uses to which they are to be appropriated. In this country, the ruta baga and white flat English are about the only sorts raised for cattle. The purple-topped yellow fleshed ruta baga is considered the best variety. The Early Snow Ball turnip is the best variety known for table use. It is an improvement upon the Early White Dutch, and is not known extensively yet in our country.

Fourth, *Beets*.—Of this root there are many varieties cultivated by man and beast. The mangel wurtzel and sugar beet, with their varieties, are considered most profitable for field culture. The mangel wurtzel was introduced from Germany into England 50 or 60 years since, and is now much cultivated for cattle. It is much larger than the common red beet, and yields crops of such great weight and succulency, that its cultivation may be justly considered of great importance, especially for milch cows, as well as other stock. Cows when fed on mangel wurtzel or sugar beet, (there is but little difference in their value) give a greater quantity of milk than when fed on carrots, but perhaps of not so rich a quality.

Roots embraced in the beet family may be grown to advantage on any tolerably good soil, which is moderately moist. If the ground is too wet, and very rich, the roots will grow to a very large size, but they are apt to

be watery and hollow, and soon rot when taken from the ground.

The soil must be deeply pulverized and well enriched. Fifty tons to the acre have been raised, and even more. These, with ruta bagas, sugar beets, and other roots, succeed better when raised on ridges.

Fifth, Parsnips. This root has not been extensively cultivated for feeding cattle, to my knowledge; yet in many points it may be considered of as much or more importance than any other root.

On rich and well manured lands, we have accounts of 30 tons having been produced to the acre.

The parsnip contains more saccharine matter than the carrot, and have the advantage of standing out all winter, and can be fed fresh from the ground in April and May. This root is very grateful to the palate of animals, and highly conducive to their fattening, and it is a matter of astonishment that no more attention has been paid to its culture.

Mr. *Seaver*, of Townsend, said he had made an experiment with plaster on potatoes, and would state the result. He had plowed up a pasture, on which he planted potatoes. He reserved four rows through the middle of the field, in which no manure was used. In two of these rows he used plaster, which was thrown over the potatoes before they were covered at the time of planting: the quantity used was about as much as he could hold in the palm of his hand: about the same quantity was applied again on the surface when they were hoed. In the other two rows no plaster was used: in these, there were many more potatoes in number than where the plaster was used, but not half the weight. Those that were plastered were large, sizeable, handsome potatoes—the others very inferior.

The Hon. *Morrill Allen*, of Pembroke, said:

The soils of Massachusetts, I believe are generally favourable for root culture. Some of them may require considerable labor in the first preparation; deeper stirring and something more of manuring, at least in the outset, will be necessary than for many other crops. I am not aware that there is any particular difficulty in raising the various kinds of roots in any part of the State. What kinds can be raised to great extent, by farmers generally with profit, is a question of great interest? Carrots can be raised in Plymouth county from 500 to 300 bushels per acre. The cost of raising is not very accurately ascertained, but will not fall much if any thing short of $100. Now it is a questionable point whether the farmers there can apply 600 or 800 bushels of carrots to farm stock in a manner to realize even the cost of raising. In the neighborhood of the city, where every quart of milk is immediately convertible into money, it is good policy to provide great variety of food for cows, but in the interior, where nearly all the profit from the cow is a more remote object, and labor quite as high, it will be prudent to feed on less expensive food even at the risk of receiving something less of milk.

My views are nearly similar of the several families of beets. They can be raised to great extent almost anywhere, but in few situations with profit. Parsnips in some soils I believe might be raised at less expense, and probably contain more nutriment for animals than any other roots. The turnip family can be raised with less expense than any other roots within my knowledge. With me they will grow any where and with very little culture. They furnish food of some importance for animals; I should like always to have some of them to feed stock with in winter; yet I raise very few. The Ruta Baga which is believed to contain the most nutriment, cannot be stored in large heaps without producing a surrounding atmosphere deleterious both to man and beast. One gentleman of my acquaintance after storing at considerable expense a fine crop of Ruta Baga in his cellar, was reduced to the alternative of taking them out again, or removing himself and family.

Our situation is widely different from farmers in England, where the turnip crop can be left in the field near or quite through the winter. I have one other objection against this crop which discourages me from raising it more than all others: I have never been able to make any other crop succeed well after turnips of any kind. This English turnip, which is raised with great ease, seems a great exhauster of soil, and the Ruta Baga is something worse. I know that turnips have long been successfully raised in England, and nothing is heard of the exhaustion of their soil. It should be remembered that all the soil of England is now artificial, and that the ammonia produced by sixteen millions of people and their domestic animals must be immense. The exhaustion of soil rarely comes into the account there. But, we must study to keep our land in decent condition with comparatively little manure.

For extensive culture, the potatoe seems to me preferable to any of the roots. It will grow with very little cultivation and will amply pay for the best that can be given. When the soil is favorable, well pulverised and good attention given to the selection of the seed, we obtain from 400 to 700 bushels per acre. As food for stock potatoes are of less value than carrots, but better than turnips. There is less danger of placing them in large heaps, and when not needed for stock, they will always command some price for the use of man, and in seasons of scarcity of provisions, they fill an important place in the market.

Having expressed these views of root crops, in conclusion I remark, that surface crops are regarded by me as far more valuable: possibly one reason of this perference may be the superficiality of my genius.

Mr. *Stone*, of Beverly, said, in reference to these Agricultural discussions, that we appeared to be getting at the "root" of the matter. The gentleman who first spoke, in his remarks on potatoes, had called up some reminiscences, for he had been glad in times past to call in the assistance of Mr. B's. predecessor, to help him out in a matter where his veracity was at stake, relative to his account of a large crop of this valuable root. The potato, he considered one of the most valuable roots cultivated: no esculent entering so largely in domestic consumption. In this respect there had been a great change within the two generations. A neighbor informed him that his grandfather told him, that turnips were used instead of potatoes; that one year he laid up 50 bushels for family use, and had that year a wonderful crop of 6 bushels of potatoes: that he was disturbed at the great quantity, and troubled to get rid of them. It was now quite the reverse; many families would lay in 50 bushels of potatoes, and not know what to do with the 6 bushels of turnips.

In his neighborhood, the cultivation of roots for cattle was attracting the attention of farmers, and many raise them extensively. Mr. Stone alluded to the accounts which were published a few years ago in the newspapers, concerning the value of the sugar beet for cattle. A neighbor of his who had a large number of cattle was induced by reading these accounts to procure the seed and cultivate it for his cattle, but it did not come up to his expectations. Mr. Stone said it was a good root but not equal in value to the carrot; his neighbour thought his cows produced more milk and of a better quality when fed on carrots, than when beets were used. He was satisfied there was not merit enough in the beets to give them a claim upon more attention than was bestowed upon other roots. In Mr. Stone's neighborhood, many substituted carrots in part for grain, and it was found that horses particularly, thrived better than when fed on grain alone. As to the value of roots, it depended upon circumstances: there was no rule that would answer for all locations to apply indiscriminately. Farmers should not be too much influenced by accounts in the newspapers, as the facts related although true, took place under peculiar circumstances, with regard to soil, climate, distance from market, &c. He thought, however, all would find it for their interest to raise some portion of their food for cattle in roots.

Mr. *Hobbs*, said it was no doubt the want of proper care in selecting the best potatoes for seed, which had given rise to the complaints of their degenerating. A neighbor of his had planted the "long red," ever since it was introduced, more than 30 years ago, and the potatoes were as fine in quality and as productive as at first, and he thought there was no better kind in the market; this gentleman always saved the best for seed. Mr. Hobbs remarked that he knew it was the custom of some farmers to plant their small potatoes, on account of their being less saleable; but when small potatoes are planted, it must be expected that the produce will be of the same quality, and if such a course must be persisted in, farmers must expect their potatoes to degenerate. He remarked that carrots were particularly good for horses: he could speak from experience: he was in the habit of giving them to his horses in equal proportions with grain.

Mr. *Knowles* of Eastham, said he did not pretend to know much about agriculture, living as he did, on the barren sand of Cape Cod. But he would endeavor to say a few words about roots. It was a general impression he said, that cattle on the Cape lived on salt fish and herring, but he had seen this mode of feeding practiced only in one town, viz. Provincetown. He said there were many small hog holes interspersed throughout his town, which when properly cleared and drained, and sand, muscles and other shell fish had been carted on, produced a great abundance of very fine roots of excellent quality. So many were raised some years that it was found extremely difficult to dispose of them to a profit, as they were at a distance form the market.

Mr. Cole remarked that economy was of great importance in every branch of farming, but especially in raising roots; said he had an account where roots had been produced at 4 cents per bushel.

He thought it best to prepare the land in the full, that the manure should then be ploughed in; some he knew would object to this course, but as he thought manure would not filtrate, there could be no disadvantage in it. As the roots of plants penetrate very deep, it was important the soil be thoroughly and deeply pulverized. As soon as the weeds began to start in the spring, the ground should be plowed or harrowed again, to destroy them, and the process should be repeated as often as they appear, until the last of May—when the seed should be sprouted by soaking and sowed. He thought by this mode one half the labor would be saved on account of less trouble from weeds. [Unless Mr. Cole's land is different from ours, we should not suppose any thing would be gained by this course. We might destroy our weeds in the same way till the middle of July and so on—and the same evil must be contended with. Until the plant shade the ground, the weeds will continue to annoy the cultivator; this is our opinion.—Ed.]

In regard to potatoes, it was found by experiment that they would not mix when planted promiscuously together when propagated from the roots.

[Nature as well as science tells us that there can be no mixture of varieties except from seedling plants, and then from fructifying one flower from the pollen of another. Our florists are fully experienced on this point: they can keep their hundreds of varieties and even thousands distinct from generation to generation, whether their roots are fibrous, bulbous or tuberous, when planted in beds together: but how easy for them to produce a flower to suit their fancy by judicious crossing.—Ed.]

Mr. *Cole* thought two bushels of carrots could be raised with as much ease as one bushel of potatoes: there might be a saving in raising carrots to sow them in double rows, with a sufficient space between, to use the plough or cultivator.

Mr. Allen enquired whether potatoes when planted together would retain their flavor. Mr. Cole said it was the practice of his father to plant two particular varieties together; this had been done many successive years without any change.

Mr. Buckminister said, the great objection to raising roots, appeared to be the cost. He should like to know by what process roots could be raised at 4 cents per bushel.

Mr. *Cole* said the case he alluded to was where a man sowed an ounce of turnep seed on a lot of new land which had been burnt over. The 180 bushels were produced which only cost 4 cents per bushel.

Mr. Medcalf, of Medway, said he would relate the experience of a neighbor in feeding carrots and ruta baga to milch cows. He fed on carrots one week, and then on ruta baga, and found the quantity of milk increased one-third when fed on ruta baga: the next week carrots were used, and the quantity diminished; but when put on ruta bagas again, it was increased, as before. The experiment was repeated, always with the same result. This was in the winter season. No unpleasant flavor is given to the milk, if the cows are milked before feeding. Mr. M. said he had experimented with potatoes, by planting a part on long manure from the stable, and the other part on hog manure. He observed a striking difference in the growth between them. Those on the hog manure looked very luxuriant and green, while those on the long manure looked pale and sickly. In digging, he found those manured with the hog manure produced one-third more.

Mr. *Gardner*, of Bristol, said he had a word to say in regard to the deterioration of the potato, when long planted. He said the Chenango potato had been 15 or 20 years in cultivation, and was to this day considered the best variety, and brought the highest price in the city of Providence. He thought the remarks made by Mr. Allen about cutting potatoes, strictly true. It was important to select the finest ones for seed.

In relation to the cultivation of the carrot crop, he thought by sprouting the seed before sowing, a saving of labor in weeding would be effected. He said one great difficulty to be encountered was, to keep them from weeds, and with this care, a great crop could be raised; but farmers generally had so many other matters of importance to attend to that they could not spend so much time in weeding carrots as was required.

Mr. *Haywood* said he should like to get some instruction from practical farmers in relation to manuring with hog manure. He planted one year, one bushel of Long Red potatoes from which he dug 22 bushels. The next year, he manured with hog manure; the vines looked very fine, and he expected a large return, but was sadly disappointed in the result. He attributed the failure to the hog manure, for the land and season were good.

Mr. Smith, of S. Hadley, thought the potato crop a valuable one; but when he thought of the toil in digging the crop in his young days, it even now makes his fingers ache. He thought the turnip crop of more importance to the farmer. His mode was to give a top dressing of ashes on the prepared land, which with the seed was brushed in. They were the cheapest food, and good for fattening cattle, provided they were not used for the last few weeks before butchering.

Mr. *Allen* remarked that in his experience hog manure was very unfavorable to the potato crop.

Mr. *Sheldon*, a drover, had some experience in raising roots. He considered potatoes the most important crop —next carrots. He thought twice the quantity of carrots could be raised on a given quantity of ground, than of potatoes, but they required twice as much manure and twice as much labor. He thought he raised 500 bushels of potatoes as easy and at as little expense, in the following manner. He carted his manure into a field where corn was raised the year before: this was left in heaps and afterwards spread: the potatoes were then put between the old hills, which were then split with the plow, and the potatoes thus covered. He thought potatoes were better for fattening cattle than any other root. He had never bought an ox that had been fattened on potatoes, but turned out as well as he expected. Mr. S. said his son had a beautiful pair of fat three-year old steers, that had no other feed than hay, grass and potatoes. Carrots were better than turnips, were more like grain, and kept creatures in better condition; the milk when fed on carrots, was of better quality and produced more butter. He estimates the turnip crop as he should a "friend in need." If he found his hay and potato crops were coming short, a turnip crop could be raised late in the season, and in such an extremity it was highly to be prized.

Mr. *B. V. French* said he had been very much interested in the discussion, but it would have been much more so had the cost of cultivating the different crops been stated. He said there was a vagueness about the statements which he hoped would be corrected.

He would suggest an easy mode of raising roots. Last year he had a good crop of Chenango potatoes, which he got off the field in season to sow Norfolk turnip seed, from which he obtained a good crop of this root; he sowed very little seed. The turnip crop was a very exhausting one.

Some other gentlemen spoke on the subject in an interesting manner, whose remarks are necessarily excluded for want or room.

SOILS.

We extract the following simple account of soils from a recent Farmers' Journal, Eng.

Mr. W. M. Chatterley delivered his eleventh lecture at Havering Bower, near Rumford on Monday, October 3d, on Soils.

Soils may readily be supposed to partake of the geological character of the formation on which they rest, and such in truth is the case. The time to which the present lectures were limited would not permit the subject of geology, even the geology of Britain, to be discussed; it would, therefore, be sufficient for the purpose to state that the three most generally diffused minerals, viz., *clay*, *limestone* and *sand*, were all necessary constituents of a fertile soil, but that the proportions in which they occurred in different soils varied, and that too in accordance with the geological character of the subsoil. As either *clay*, *lime* or *sand* was the predominant ingredient, soils were classified accordingly into aluminous, calcareous or siliceous soils. Either of these earths alone form a barren soil; and, as each may be in greater proportion, it imparts to the soil its peculiar character; stiffness, attraction and retention of moisture, hardening into a brick-like consistency, and cracking during dry weather, the characteristics of soils on the clay; great friability, speedy filtration of water, and general dryness, are the opposite characteristics of sandy soils, plainly indicating their mutual admixture as a means of remedying some of the defects of either; the ruby or marly character of calcareous soils, allows of speedy filtration, and causes too great dryness, indicating the benefits to be derived from the addition of either clay or sand. An excess of sand is much less injurious than an excess of clay; indeed, all the most fertile soils contain a larger proportion of sand than any other mineral ingredient. The different natural mixtures of these earths have given rise to the different terms by which peculiar soils are distinguished, as *loams* where clay and sand form the chief constituents, or *marls*, where clay and limestones most abound. The purest clay soils, do not contain less than 60 per cent. of silica, while many siliceous soils contain from 90 to 95 per cent of sand.

Vegetable matter in soils is also necessary to their fertility; and the varying quantity of this material, from about 10, as in garden mould, to 70 per cent., as in peats, gives to these soils the characteristic whence they derive their names.

But, as has been said before, neither the purer forms of clay, sand, or limestone alone form fertile soils, but the contrary; so it is to a *proper* admixture of these that we must look for the fittest condition of a soil. It generally happens most happily that sand, clay, or lime are found within reach of one another, and ready to be used mutually for the amelioration of the soils, in which they hurtfully predominate; and it should be remembered that such amendment is permanent.

The other constituents of fertile soils are various; but, in order that they should retain their fertility, they must constantly contain the alkalies, potash and soda, and the alkaline earth magnesia, with the sulphuric, muriatic, and phosphoric acids, the peroxides of iron and manganese—these substances serving as the food of plants, while the sand, clay, and limestone form the body of the soil, amongst the particles of which the roots penetrate, and support the plants by their mechanical action.

The chemical properties, however, of the three chief constituents of soils should be attentively considered also, as tending to elucidate many anomalous instances of unproductiveness in particular soils. The attractions of clay for water renders it highly useful in siliceous soils, which have no such property; its adhesiveness tends to bind together the loose falling particles of the sand; while these very properties, when in excess, tend to render the soil unfruitful, and are then to be remedied by mixture with sand or lime, to increase the friability and filtration, and thus, in either case, to permit the passage of air and water amongst the particles of the soil in such a manner as to preserve a due but not excessive degree of moisture in the soil, so that it is neither retained too long, nor removed too soon. These three, the chief constituents of the soil, though they may either of them be requisite in a slight degree as the food of plants, are not to be considered in this light merely, but rather as having for their chief use the mechanical duty of affording support for the roots of crops.

The state of chemical combination, in which the various ingredients of the soil are found, also materially influences its fertility, through such combination should differ somewhat for particular crops; for instance, wheat requires that a portion of silica should be in union with potash, and for clover, that sulphur should exist in the soil in the condition of a soluble sulphate; should the soil, however, contain sulphate of the protoxide of iron, as is the case sometimes in the London clay and in peat soils, it is altogether injurious, and should immediately be converted into peroxide by exposure to the atmosphere, by frequent and deep ploughing, harrowing, and disintegrating.

Much practical matter, as to the mechanical action of the various farming operations, and on the chemical constituents of soils, was added, but it is to the chemist that the farmer must apply for a knowledge of the minor, but still, deficiences of his soil, and for the easiest and cheapest mode of remedying them. There was no reason why a farmer should not be acquainted with chemistry; but if not so himself, there were many of the latter class who now were turning their attention to agriculture as connected with the science, and with whom there would be no difficulty for the farmer to put himself in communication.

The proportions of the chief constituents of soil, best suited for all crops, were then shown to be from 50 to 70 per cent. of silica, from 20 to 40 of alumina, and from 10 to 20 of calcareous matter.

The mode of arriving at a proximate determination of the relative qualities of each of them was then shown. The quantity of *moisture* was found by drying a given weight in an oven, and finding the loss of weight; the quantity of *vegetable matter*, by heating a given weight of the dried soil to redness, and estimating the loss; the quantity of *soluble salts*, by washing a given weight with water, filtering and evaporating the filtered liquor to dryness; the quantity of *carbonic acid*, by throwing a given weight of dry soil into a given weight of diluted hydrochloric acid, and estimating the loss of weight after effervescence had ceased; the quantity of *lime*, by filtering the solution in hydrochloricacid thus made, and the precipitating by oxalate of ammonia; the quantity of *clay* and *sand*, by repeatedly washing a given weight of the soil with water, and pouring off after allowing it to settle for a minute or two until the two were entirely separated, then drying and weighing each.

Preparation of Clover Seed.—We have received two communications from Joseph Warbasse, of Newtown, Sussex county, N. J., on the preparation of clover seed for sowing, by which the writer calculates he makes a saving of one half the seed required. This is a matter of no little consideration at the present price of seed.—Mr. Warbasse's process seems to be predicated on the assumed fact, that ordinarily more than one half of the seed sown does not germinate, either from the want of moisture to swell it, or of gypsum, the presence of which he considers essential to stimulate the germinating principle. Mr. Warbasse is probably right in stating, that one half the clover seed sown does not come up; and he is strengthened in his supposition that much of it remains dormant in the soil by the fact he states, and which is of common notoriety, that plaster sown upon light lands, will bring in clover, where no seed is sown at the time. Mr. Warbasse's remedy for the evil is, to saturate and swell the seed thoroughly in soft water, to which a small quantity of salt is added, and after it has become well saturated, to coat it with gypsum, &c., the effects of which seem to be to prevent the escape of moisture which the seed has imbibed, and thus insure its germination and growth. A further advantage may be, that the salts impart fertility to the soil which comes in immediate contact with the seeds, and causes a more vigorous growth. Such seeds to be the philosophy upon which Mr. W.'s practice is founded. We give the process of preparing the seed in his own words:

"The seed is to be made thoroughly wet with a strong pickle from your pork cask, so as to wet the floor; then let it remain as a heap one day, it being thus made larger in each grain. In cold weather warm your pickle and give it an additional salting next day. Spread it about 1 or more inches thick on a dry floor, and in a few days a crust of salt will be formed on each grain, again enlarging it; when you wish to sow it, the weather being calm, moisten it with more salt pickle; spread it over a floor, and put on it about three quarts or more of plaster to a half bushel seed; mix it well; the plaster will adhere to the crust of salt on each grain, still further enlarging it; and thus you have in bulk nearly one bushel out of half a bushel of seed. Keep it moist in a cellar until you sow it, and take no more seed in your fingers but rather less than in the old way, making longer steps while sowing, and go over the eight-pace land three times. I have thus sowed twelve acres or more with one bushel of seed, and all in good condition.

For want of plaster, strong dry ashes may be used, not over moist; but as I have not fully tested the advantages of this method, I shall leave it as it is."—*Yankee Farmer.*

Chicken Salad.—Boil a chicken that weighs not more than a pound and a half. When very tender, take it up, cut it in small strips, and make the following sauce, and turn over it: Boil four eggs three minutes—take them out of the shells, mash and mix them with a couple of tablespoonfulls of olive oil, or melted butter, two-thirds of a tumbler of vinegar, a teaspoonful of mixed mustard, a teaspoonful of salt, a little pepper, and essence of celery, if you have it—if not, it can be dispensed with. In making chicken salad, the dressing should not be put on till a few minutes before the salad is to be eaten; as by laying in it, the chicken and celery will become hard.—*Mrs. Ellis.*

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

SEEDS FOR DISTRIBUTION.

We are indebted to the Hon. *Henry L. Ellsworth*, the commissioner of the Patent office—*a gentleman who delights in watching over, and catering for, the agricultural interest*—SEVERAL PACKAGES OF SEEDS for gratuitous distribution, which it will give us pleasure to distribute among applicants. The parcels are thus marked:

Improved Caroline Water Melon.

Kloss' White Blue Stem (winter) Wheat.

Pole Beans, the product of Massachusetts.

Calcutta Flax Seed, [much larger than American, and yields 15 to 20 per cent more oil.]

Prolific White Bean, [has yielded 40 bushels per acre.]

Excellent White Corn.

Improved Yellow N. E. Corn.

MULTICOLE RYE—to be sown in June—straw 8 to 10 feet high—the ear 10 to 11 inches long—weight 58 lbs. to the bushel. It may be pastured or cut the first year, and will bear a good crop of grain the second.

Birdseye or Nansemond Water Melon.

White Flint Wheat—Harman's premium.

Improved Black Water Melon.

Bassano Root.

Tuscany Winter Wheat.

Calico Corn.

Improved Maryland Water Melon.

Asparagus Pole Beans.

New, Excellent, Garden Peas.

Etrurian Winter Wheat—introduced by Com. Stewart.

White Flint Corn—excellent for meal and hominy.

Twin Corn—Gen. Forman's prolific.

As the quantity of seed of each kind, is necessarily small, such of our subscribers as may feel disposed to experiment will do well to make early application.

WORK FOR MARCH—CONTINUED.

As the time has arrived when all, who take delight in providing an early and plentiful supply of vegetables for their families, should be making the necessary arrangements for their culture, we purpose to point out what can, and ought to be done promptly

IN THE GARDEN;

But before we commence our detail, we would claim the privilege of an old friend to say to each and all of our readers, that it should be the pleasure, as it certainly is the duty, of every husband and father to provide such a *garden* as the ladies of his household could take pride in; for besides the solid comfort, the luxury and profit to be found in a well arranged and properly cultivated one, there is a degree of intellectual enjoyment to be found in it priceless of value: nor is this all—we have never yet known a bad man who was really a lover of horticultural and floral pursuits. With these prefatory observations let us proceed to business.

Sowing Seeds for Early Crops.—As soon as the frost is out of the ground prepare a bed on a warm protected border for sowing different kinds of early vegetable seeds. Manure it heavily with strong, fresh horse dung, which should be dug in with a small and deep slice, and raked well. Then take a compost of well-rotted manure or garden mould and ashes, 6 parts of the former to 2 of the latter; spread this on your bed an inch deep and rake it in. When this is done, your bed will be ready for sowing any of the following kinds of seed: *Early and Late Cabbages, Lettuce, Tomatoes, Cauliflowers, Egg-plants*, &c. The seed being sown, rake them lightly in, pat or smooth down the ground with the back of your spade, and your work will be done.

Should the plants be attacked by the fly or lice after they have come up, take a quart of soot, one quart of ashes and ¼ lb. sulphur, mix the whole together well, and sow it for four or five mornings *early* on the plants, and you'll not only relieve them from the fly or lice, but promote their growth also.

Peas.—If it is your wish to have an early crop of peas you should sow as soon as you can get the ground ready. The Pea is a hardy vegetable, and will stand both frost and cold. We have grown them amidst snow. The best way to raise the early crop, is to gather up broad furrows, split them in half, and sow plentifully of seed. The ground in which peas most delight, is a deep sand or sandy mould, in good condition, and but moderately manured. The rows should be 4 feet apart. If it be desirable to secure a continuous supply of peas for table or market, they should be sown at intervals of a week for five or six weeks in succession.

Cabbage Plants.—If you have provided yourself with a bed of cabbage plants, and they are big enough, the sooner they are transplanted the better; therefore as soon as the ground can be dug, prepare your bed, by manuring heavily, digging deeply and raking firmly, and set out your plants. If you want to preserve them from the cut worm, make a mixture of soot and sulphur, brought to the consistency of cream, by hot water, and as each plant is set out, dip the roots and stem with the mixture as far up as the bottom leaves.

Beans.—The Windsor, Mazagan and Lisbon Beans may be planted as soon as ever the frost is out of the ground to enable you to prepare it well. Beans thrive best in clay, which should be well manured.

Setting out Plants.—Plants of nearly every kind of garden vegetables may be set out as soon as the ground can be put in good order.

Herbs.—Cooking and Medicinal Herbs of all kinds may be now either sown or planted out—and the sooner the better is it that either is done. While we are speaking of Herbs let us say to every farmer that he should have in his garden, Thyme, Parsley, Rhue, Sage, Sweet Marjory, Balm, Mint, Lavender, Bergamot, Catnip, Chalots, Shives, Leeks, &c.

Radishes.—Begin to sow your early Radishes and continue to do so, at intervals of ten days, throughout the season.

Spinach.—This fine old fashioned vegetable should be sown as early as possible this month, and in order to have it good and forward, the ground must be well manured.

Carrots, Parsnips and Beets.—If you wish to have either or all of these fine roots early on the table or ready for market, you cannot get the seed in too early. Spade deep and manure moderately, with a compost of well-rotted stable manure, mould and ashes.

Celery.—If it be your wish to have an early crop of this delicious and healthful vegetable, sow some seed early—the sooner the better—but be sure neither to spare the spade, manure nor rake in preparing the ground. If planted immediately the plants will be fit to set out in May.

Broccoli.—Seed of this must now be sown.

Kale or Brussels Sprouts.—Prepare a bed and sow a bed of this excellent sprout. Manure well, dig deep and pulverize the soil well, then sow your seed broadcast and you need not fear the result.

Asparagus Beds.—Dress your Asparagus beds with a compost of well rotted manure and ashes: then sprinkle salt freely over them.

If you desire to form new beds, the sooner the better the beds are formed and the plants set out.

Onions.—Sow onion seed this month, and do it as early as possible.

Garlic.—The seed of this should be sown, or the bulbs set out early.

Early Turnips.—Prepare a bed thus: dress it well with long manure; dig it in deeply; then rake the bed well, after which sow on about an inch deep a compost of well rotted manure and ashes, 6 parts of the former to 2 of the latter, then rake this in, sow your turnip seed, rake it in and press the seed with the back of a spade, and when the plants first begin to show their heads, sprinkle a mixture of *ashes, sulphur and soot* over them early of a morning, four or five days in succession: or if you prefer it, you may sprinkle fish oil over them with a mop.

Early Potatoes.—These should be planted as soon as ever you can get your ground ready—manure the bed well before digging it up—and be sure to put *plenty* of long manure in the drills, so as to cover the potato sets well, and then, before covering them up sprinkle them over with lime or plaster.

Salsify.—Sow the seeds of this vegetable early this month.

Artichokes.—The earlier the seed of these are sown the better: the beds where they may have been planted should be dressed.

Horse Radish.—This is one of the most healthy of roots, and no garden should be without a bed of it: besides being one of the best condiments used on the table, when made into *Syrup*, it is one of the best remedies for a cold we know.

Rhubarb or Pie Plant.—The plants of this excellent vegetable should be set out as early as possible. If you have no plants, make it your business to get a dozen or two from some public gardener, and plant them out in a good deep loamy border, and you will secure a great delicacy for your family's use. The Rhubarb makes as good and pleasant a pie as Gooseberries, and has this advantage, that it is more healthful.

Fruit Trees of all kinds, Shrubbery, Grape Vine Cuttings, &c.—Every thing of this kind should be planted out as soon as the ground can be got in readiness.

Fig Trees may be either pruned or set out this month, and the sooner that either is done the better.

Gooseberries, Currant and Raspberry Bushes, should be trimmed, dug around, or transplanted as early as possible this month. If you have none of either, get some of each and plant them out, for no garden should be without such excellent fruit.

Strawberries.—If you have a bed of strawberries, clean and dress it without delay. If you have not, procure the plants, and set a bed out, as no father should permit his family to be without such a delightful as well as healthful luxury.

Annual Flower Seeds, of almost every kind, may be sown at any period of this month.

Flowering Bulbs may be set out.

We have thus briefly furnished a *memoranda* of garden duties, by which you may profit, and in the hope that you will do so, permit us to renew our oft repeated advice—*see, yourself*, that all your orders are executed at the time and in the way they are given, as you may rest assured that your own *eyes* are worth any two pair of *hands* you may have in your service. *Attention* on your part will beget *vigilance* in your workmen, whereas *neglect* in you will sow negligence broadcast throughout your garden.

Wounds and Bruises in Horses.—Take one quarter of a pound of saltpetre, half a pint of spirits of turpentine; put them together in a bottle, and shake up before using. Apply it to the wound with a feather, three times a day.

[*Boston Cultivator.*

A four year old steer, raised and fattened in Little Compton, by Job Briggs, was slaughtered in Fairhaven on Tuesday, by Thomas Brimblecome, and weighed 1503 pounds.—[*New Bedford Mercury.*

For the American Farmer.

Farm Content, Near Westminster,
February 28th, 1844.

Mr. Editor:—"A Subscriber" asks in your last number the distance which I observed in planting my corn last season. The gentleman is correct in believing that any information I am able to give, is at the disposal of my brother farmers. My whole object in giving publicity to my success in cultivating this crop for the last two seasons, was to excite the competition of the farmers of old Maryland. I therefore invite them to the lists, and assure them that nothing will give me more pleasure than to be beaten, provided I succeed in making a good crop myself.

I plant my corn as follows: I furrow it out but one way, making the rows distant 4 feet 6 inches, and step it the other way, as near as can be guessed at, 2 feet apart. I last season left four stalks in a hill, but as a general rule I would recommend but three. I plant enough seed to leave four, if the season promises fair, and if not, I thin down to three.

My opinion is, that corn may be planted as thick as you please in the row, if sufficient distance is given the other way for a free circulation of air, and the ground strong enough to produce it.

Hoping these answers may be satisfactory to "A Subscriber," I am, truly yours,

AUG. SHRIVER.

Baltimore, March 4th, 1844.

To the Editor of the American Farmer:—

Dear Sir,—A friend has handed me one of your papers of February 28th, in which I see a certificate of Mr. Abner Linthicum, Jr., stating that it was determined by a vote of 4 out of 5 judges, to give Mr. George Page the first premium for his Corn & Cob Crusher & Horse Power but the whole merit he places to account of the crusher. Now by refering to the report of the Committee of the Baltimore Co. Agricultural Society, I find that Mr. Page's Crusher ground 12 ears of corn in 40 seconds—Mr. Linthicum also states that it was universally admitted that the Corn and Cob Crusher could do twice as much as any other on the ground, but does not state what power is required to grind at that rate. I take the report of the committee for the quantity ground: 12 ears in 40 seconds; now divide 1 bushel or 108 ears, which is the same by 12, we have 9—9 times 40 seconds, or just 5 minutes to a bushel of ears of corn; this I cannot admit to be double what my crusher will grind, nor is it as much as mine will grind of the same quality—at $40 or $45.—Mr. Linthicum, Jr. and all Machinests are invited to a fair trial of grinding, and if I do not do more work, taking the power, quantity and quality into consideration, I will give them my machine gratis.

N. B. The public are cautioned a second time against making or vending Corn Crushers having a tube, or tubes for holding the ear of corn, as the same is patented. Patent rights for sale by the subscriber.

JAMES MURRAY,
Millwright & Machinist.

From the Baltimore American.

Agricultural.—The *Shell Wheel Plough* is the name given to a newly contrived Plough, which is thus described in the Albany Advertiser:

In this plough, its inventor, Thomas D. Burrall, Esq. of Geneva, in this State, has furnished the farmer with one of the most valuable improvements yet accomplished in any of the implements of husbandry, for economising labor. The improvement consists mainly in the introduction of a cast iron friction-wheel in *place* of the *land side* of the plough. It is very obvious that this must necessarily lighten the draught very materially. The difference may be understood by considering how much more easily a *wheel* can be drawn on *bare* ground, than a *sled*, or *sleigh*. The new plough has been put to the test by the inventor, on his own farm, and by various other farmers, during the past season; and it took the premium over all competition, at the great Agricultural meeting at Rochester last Fall. On that occasion 24 ploughs of the very best construction were put to the test, and this Geneva *wheel* plough No. 2, was found to turn a furrow 12 inches wide and 6 inches deep, in a strong sward, at an average draught equal to 298 lbs. weight, while the Geneva Plough No. 2, of precisely the same size and shape, with the usual land-side, and without the friction-wheel, required, for the *same work*, an average draught equal to 397 lbs. showing a saving of *team-power* of about *one-third* in favor of the new wheel plough. This is a very important saving. The plough works admirably well in all soils and all conditions of the ground. The wheel, and the manner in which it is connected, are exceedingly simple, and the whole implement moves with great steadiness and firmness in its work, and is more easily managed and handled, than the ordinary plough. We think the inventor and patentee, is fully warranted in saying that this improvement will mark a new era in the history of this great implement of tillage.

To the Editors of the American:

Gentlemen—In your paper of the 29th inst. we notice a description (taken from the Albany Advertiser) of a Plough styled the *Shell wheel Plough*, and invented by Mr. Burrows near Rochester. We are perfectly satisfied of the many advantages the wheel possesses over the ordinary sleigh runner shaped Landside, and give Mr. B. credit for the introduction of so valuable an implement in the State of N. York,—and regret that we cannot also accord the invention to his inventive genius. The wheel plough as described by Mr. B. was invented by Wilkie, an ingenious Scotchman in 1814, which subsequently has been modified and improved by us, which improvements by the way we claim, and without which the wheel would clog up with dirt and be a useless incumbrance to the plough. Farmers wishing to see this plough are referred to our description of it in the last volume of the American Farmer, and to the Cultivator office at Albany. The plough may also be seen at our warehouse No. 60 Light street.

Very respectfully, yours, &c.

Robert Sinclair, Jr. & Co.
Manufacturers and Seedsmen.

Cutting Fodder for Cattle.

The annexed communication which we cut from the *Massachusetts Ploughman*, details some curious facts in connection with the feeding of cut and uncut fodder to stock. The results of the experiments stated should excite farmers to make others.

Mr. Editor,—Dear Sir: Economy is the order of the day; and surely the farmer must study economy, or in these days of low prices, for his produce, he can make headway but in a down-hill course.

Many labor saving machines are in these days put in successful and profitable operation, and there are many improvements in the principles of operating old machines that were absolutely necessary in the day of their existence. The old dark churn has been turned into a convenient vessel for holding articles not liquid, and has given place to many improvements on the commoving principle, which do the work in a more speedy and satisfactory manner. The same may be said of the old screw and roller cheese-presses, which were enough for one in near affinity to the giants, to operate.

It is not my purpose to speculate on these implements so necessary to the comfort of every dairy woman, but rather to speak of one which combines a saving of labor for our stock, and of hay in our barns, while at the same time it decreases the labor of man. I allude to the *hay cutter*.

I have for years, practiced cutting hay for my horses, which, mixed with meal, I think is by far the best and cheapest feed they can have. No fear need be entertained in giving your horse his customary grain in this way, even when he is warm; and he is always ready for the harness. But to cut hay for neat stock, and give it to them, without any mixture, I must confess, always seemed to me a waste of labor—the saving was rather to the beast, than to his owner, though I do not grudge the ox his quiet. However, having heard much said, and seen much that had been written on the subject of cutting hay for stock, of its vast importance in point of economy, I was induced to purchase one of Hovey's $25 cutters last fall. I put it into immediate use and admired it as every man must, *as a cutter*. I could mix a meal for my cattle, which no one of them would refuse, though two thirds of it should be coarse hay and straw. There is no mistake —*they do like hashed food.*

To test the value of the cutter in point of economy I adopted the following method, viz. After having kept four oxen on long hay for some days, I weighed hay enough to keep them 24 hours. At the expiration of which I weighed what hay was left, together with what little remained in their cribs, and found they had eaten 104½ lbs. of hay. Their excrement evacuated during the same time weighed 178½ lbs.; exceeding the quantity of hay by 74 lbs. They were kept in the barn all the time except being driven to water, after which they were immediately put into the barn. While out, only one ox voided, of this there was no account made.

I then kept them 24 hours on cut hay from the same mow, thinking that in this time they might empty themselves of the long hay. I then weighed 104½ lbs. (the same quantity they ate of long hay) from the same mow—kept them in the barn and watered as before. With them there was no difference except in this instance, they all returned to the barn without having anything pass from them.

At the end of the 24 hours I weighed the hay that was left, and found they had eaten 80 lbs. only; and their excrement during the same time weighed 208¼ lbs. It was my purpose in each instance to let them have what they needed, and no more; in neither case was there a waste of hay, and in each the oxen were comfortably filled. They had done no work for several days before being put on the trial, nor did they do any while on trial, nor during the intervening 24 hours.

You have the facts, which shew that the four oxen did not eat so much cut, as long hay, in the same length of time, by about 18 per cent.

They also show that the excrement during the same time, from the cut hay exceeded that from the long hay by about 15 per cent.

If we look only at the quantity of hay consumed and manure made, we shall be left to conclude that there is a double profit in cutting hay. We spend less hay and make more manure, which is said to be the farmer's capital. But there may be a doubt in the mind of some one, whether in the excess of manure there is not a diminution of nutriment towards the support of the ox. To this I can say that so far as my observation has followed the appearance of my stock, I have not discovered but what it has done as well on cut, as it has on long feed. This advantage I know we reap. The manure heap is *clear manure*. There is no mixture of hay which has been flung by the cattle from the crib and trodden under foot and fouled, that it cannot be eaten.

The mystery in regard to the less hay making the most manure I shall leave for you to solve.

Respectfully yours, &c., Thomas W. Ward.
Shrewsbury, Jan. 29, 1844.

Ploughing in Corn for Manure.—We find in the Louisville Journal, of October 25th, an excellent article by a correspondent, on the subject of manuring land, by sowing corn broadcast and ploughing it under as a green dressing. It is only one of the many instances which have come to our notice the present year, in which sowing corn has been experimented on, and in every instance with marked success.

In the case recorded in the Journal, the field contained 37 acres, and the year before had been in corn, and previous to being sown, had not been broken up, and the old stalks still remained on the ground. The latter part of April, 30 acres were sown with corn, at the rate of two bushels to the acre, and 7 acres at the rate of three bushels per acre. The whole, old stalks and all, was covered by the plough about two inches deep. It came up and grew equally until about two feet high, when a difference began to appear, and at maturity the thick sown was but five feet high, while that sown thin was seven or eight. The writer is decidedly of the opinion that two bushels or even less, is a sufficient supply of seed per acre. To turn the corn under, a heavy roller was used, which pressed and mashing the corn close to the earth, and in one direction, enables the plough to cover it perfectly. In this way, stalks ten or twelve feet high may be crushed down and turned under without difficulty. The writer adds:

"Were my only object the rapid improvement of my soil within the shortest space of time, I would not seek further or better means than first sowing down thick with rye, which I would plough under just before the time of ripening, to prevent its seeding the ground, and upon which I would sow one bushel and a half of corn per acre; thus in the same season, ploughing under a heavy coat of rye and corn, which, in the short space of twelve months, will equal, if not surpass, any benefit which can be derived from clover in two years."—*Alb. Cult.*

Prepare at once for a vigorous Spring campaign.

INTERESTING TABLE—WEIGHT OF CATTLE.

We copy the following interesting table from the *Maine Farmer*, and commend it to the reader:

WEIGHT OF CATTLE AGCORDING TO THEIR LENGTH AND GIRTH.

In buying and selling Cattle, it is oftentimes useful to have some standard of comparison by which we may give "*a pretty near guess*" as to the weight, after it has been slaughtered and dressed. The following table has been laid down, by several authors, as being a good guide for this purpose.

The girth is taken in the usual place, behind the shoulder in a straight line to the hindermost point of the rump.

We have taken pains to reduce this table to lbs. instead of the English stone (14 lbs.) in which form we found it calculated. We wish some of our butchers would take a little trouble to measure cattle when they slaughter them, and compare the results with this table and let us know how near it comes to the truth.

Girth.	*Length.*	*Weight.*	*Girth.*	*Length.*	*Weight.*
ft. in.	*ft. in.*	*lbs.*	*ft. in.*	*ft. in.*	*lbs.*
4 3	3 0	180	6 6	4 6	633
	3 3	195		4 9	608
	3 6	210		5 0	704
	3 9	225		5 3	739
	4 0	240		5 6	774
4 6	3 0	202		5 9	809
	3 3	219		6 0	844
	4 6	236		6 3	882
	3 9	261	6 9	4 6	683
	4 0	270		4 9	721
	4 3	286		5 0	759
4 9	3 3	244		5 3	787
	3 6	263		5 6	835
	3 9	282		5 9	874
	4 0	300		6 0	911
	4 3	319		6 3	949
	4 6	338	7 0	4 9	776
	4 9	357		5 0	816
5 0	3 3	271		5 3	857
	3 6	292		5 6	898
	3 9	315		5 9	939
	4 0	334		6 0	1073
	4 3	355		6 6	1040
	4 6	377	7 3	4 9	832
	4 9	398		5 0	876
	5 0	590		5 3	979
5 3	3 3	298		5 6	963
	3 6	311		5 9	1007
	3 9	344		6 0	1051
	4 0	327		6 3	1098
	4 3	380		6 6	1138
	4 6	413	7 6	5 0	937
	4 9	436		5 3	984
5 6	5 0	359		5 6	1031
	3 6	352		5 9	1078
	3 9	378		6 0	1125
	4 0	403		6 3	1171
	4 3	428		6 6	1218
	4 6	453		6 9	1265
	4 9	488	7 9	5 0	1001
	5 0	504		5 3	1051
	5 3	529		5 0	1091
5 9	3 9	413		5 9	1151
	4 0	440		6 0	1201
	4 3	478		6 3	1251
	4 6	495		6 6	1301
	4 9	523		6 9	1351
	5 0	551		7 0	1400
	5 3	478	8 0	5 3	1120
	5 6	606		5 6	1173
6 0	4 3	510		5 9	1226
	4 6	540		6 0	1280
	4 9	570		6 3	1333
	5 0	600		6 6	1386
	5 3	630		6 9	1440
	5 9	660		7 0	1493
	6 0	722	8 3	5 6	1247
6 3	4 6	645		5 9	1314
	4 9	628		6 0	1361
	5 0	665		6 3	1417
	5 3	683		6 6	1474
	5 6	716		6 9	1531
	5 9	748		7 0	1588
	6 0	781		7 3	1647
	6 3	824			

RYE, ITS ADVANTAGES, AND THE TIME OF SOWING.

Mr. Editor,—I rejoice in view of the success of your paper, and the more so, inasmuch as that success is in fact the *advancement of the agricultural prosperity* of our common country:—(not to disparage, or in the least degree undervalue other Agricultural Journals.) The Ploughman is what practical farmers need:—Yet, it is not *all that might be*,—and why? Because many, very many practical farmers do not contribute their share to the general stock of information. Surely, it is not the *whole of a farmer's duty to pay for his paper, and read what others may communicate* of their success or reverses in agricultural matters: (if we may not neglect these duties,) and certainly we may not! yet, by what rule of moral rectitude, *are any of us*, who can read and write, exempted from giving our share of that information we so highly, and justly prize, in the Ploughman, *its farmer-like productions*. I might enlarge on this topic, but having made some remarks on the subject in a former communication, and hoping that a hint will be sufficient, I leave the duty for honest men to examine and decide, and will proceed to make some observations on the cultivation of winter rye.

In this part of the Commonwealth winter rye is perhaps as sure and as profitable a crop of grain, (if not the most so,) of any we can grow. It commands a higher price in the market, and is intrinsically worth more than Indian corn,—it requires much less labor, both in producing and in harvesting than corn,—it is better adapted to our soils and climate than any other of the small grains,—nor is it near as exhausting as corn. I am aware, however, that these remarks will not apply to some sections of the country, though they may to a large proportion, and surely are worthy of due consideration where rye can be advantageously grown. For many years past I have cultivated from two to four different fields of this grain, and upon almost every diversity of soil and with very general success: as much so at least, as Indian corn, which is considered as certain as any grain we can raise. My practice has been to sow with my corn crop in part, hoeing in the rye in the month of August, and preparing and sowing the remainder at such times from the 10th of July to the 10th of November, as my other labors would permit; which has given me an opportunity to observe the various results of such sowings, as to time, quantity of seed, manure, &c. I am convinced that as a general rule, there is no better season to sow, all things being considered, than from the 20th of August to the 10th of September; having found rye sown before the 20th of August, almost invariably to become rusty in the summer and fall, which causes it to die out so as greatly to injure the crop:—and that sown after the 20th of September does not appear to have time to become rooted in the earth, and to provide for itself a sufficient mantle, to protect it from the frosts of the winter. Yet the late sown crops have been found to succeed much better than those sown in the first part of the summer; rye being a hardy plant will usually withstand the winter's frosts, provided the soil is not clayey or subject to heave.

As to seed I have used from $\frac{3}{4}$ to $1\frac{3}{4}$ bushels to the acre. And have found $\frac{3}{4}$ of a bushel sufficient for stubble ground, where rye was harvested the same season; and 1 $\frac{1}{4}$ bushels for highlands, and for lowlands I have added another peck of seed. Dean, in his New England Farmer, recommends from $1\frac{1}{2}$ to 2 bushels of seed; I am satisfied however, for highlands a bushel is preferable to a bushel and a half; although the one is too little, and the other too much:—if we sow too much seed, the straw will be too thick and the heads necessarily short and but poorly filled. I have also observed that if we sow too little seed the grain is more liable to rust, near the time of harvest, and to be injured by the growth of weeds.

The same writer says page 287 "I have known the same spot produce twenty crops of this grain in succession, (excepting that it was planted in Indian corn once or twice to subdue the weeds) the crops yearly increasing. The right method is, to plough in the stubble as soon as the crop is off, &c. The stubble, so early buried in the soil, serves as a manure. It will need no dung." Such management *may* do on a virgin soil, *for a time*; but, if we rob mother earth, by taking crop after crop, returning nothing but the stubble, depend upon it, it will not be long before we have a most miserable inheritance. But if we apply one half as much manure, as we ought, for a good fair crop of Indian corn, say ten or twelve loads to the acre, and plough under the stubble in addition, our lands will improve, and *reward* us amply for all our trouble. In former times I used to turn my manure under the furrow, but have found it a much better way to apply it on the furrow and harrow it in, after which I roll the land, if dry, with a heavy roller.

Respectfully yours,

CHARLES W. MACOMBER.

Mass. Ploughman.

From the Farmer's Cabinet.

POTATOES.

The time is fast approaching, when the farmer will have to look about and gather up his implements and prepare for action.

It is believed by many that the potatoe may be cultivated to great advantage, both for feeding milch cows and for fatting various kinds of stock, and especially swine. And the question very naturally arises, whether it is better to boil them for fattening hogs, or feed them raw. Some apprehend the labour and expense necessarily incurred by the process of boiling, are altogether thrown away, and that the apparatus and fixtures for such a process are only a nuisance, and calculated to enhance the labours of the husbandman, and impose a direct tax on his time and attention, without a corresponding advantage or profit. It is indeed difficult to conceive how the process of boiling can add or communicate any additional fattening properties, which they did not possess in their crude state: it might be urged, however, that by boiling and reducing them to a pulp, and mixing with a portion of meal, the animal would eat more and of course fatten sooner:—by such a process he might indeed to the eye appear to fatten faster; but when dressed and on the scales, the deception would appear; besides, experience has taught our best feeders, that to force the fattening process of any animal being always in danger of being cloyed and losing his appetite, and thrown into a fever by too great repletion, which generally requires some considerable drawback on his improvement.

But instead of all this, we would recommend what we think a more simple and easy way for the farmer to fatten his swine; that is, if he desires potatoes to be a part of their food, which we think would be to his interest: Let him give them at proper stated times, their daily allowance of grain; say four quarts each per day, either whole or pulverized, wet or dry, as he pleases, and then let him give them regularly as many raw potatoes as they will eat clean, and let the sty be kept in good order and well littered, and our word for it, his hogs will show out well, either in the tub or in the market. If the feeder's corn is scarce, he can give them less grain, or if potatoes are scarce, let him give them more grain, regulating his feed as circumstances may require.

The object of this essay, is partly to give publicity to a method by which the writer is induced to believe more potatoes might be raised to the acre, than by any other method that has come to his knowledge, and with the least labour.

The writer has not had any experience as yet in the process he is about to recommend, but intends making the experiment the ensuing season on a small scale, and desires nothing more than that his plan may pass for what it may be thought to be worth.

The following is the plan proposed:—Measure off from your corn-stalk field as much land as you desire to plant with potatoes; then haul on the manure, giving it a very liberal coat of the best you can obtain; spread it carefully, then sow it with plaster, at the rate of three or four bushels to the acre; prepare your seed, and as the mode now is to plough around the field; as you do this for oats, drop the potatoes one foot apart in every furrow; and as the furrows are generally about a foot wide, you will then have a cutting on every square foot of ground, and admitting the plants would yield an average of two ordinary sized potatoes each—it has been ascertained that 280 middle sized potatoes make a bushel—then as there are 43,560 square feet in an acre of land; and calculating 280 potatoes to the bushel, we have a yield of 311 bushels to the acre, which being sold at one-third of a dollar per bushel, would amount to over a hundred dollars; and they often sell much higher. All the labour you have after they are planted, is to harrow the ground about the time of their coming up: the tops will so effectually cover the ground as to prevent the weeds from materially injuring them; being planted early, they will be ready to harvest by the time you plough your out-stubble for wheat, they can then be turned out with the plough and grappled with the fork in the usual way.

A FARMER.

Vitality of Peach Stones.

Mr. Editor,—Dear Sir: If you think the following facts are worthy a place in your excellent paper, by inserting them you will much oblige A Subscriber.

Some forty or fifty years since there were standing by a wall on the farm which I occupy, a row of Peach trees three or four rods from each other: these trees were then in full bearing, but most of them have now been dead for over thirty years. However, there were two remnants of trees five or ten years ago, and where the one that last died stood, a fine young tree bearing excellent fruit, has sprung up.—About two years since I removed the old remnant of a wall which had become much fallen down and covered with blackberry vines, when ten or twelve young trees came up and are now standing on the ground once occupied by the old wall. It surprised me that they should have retained the power of germination so long; but I think they must have been scattered from the tree around whose site they came up. I intend to preserve some of them as they seem so tenacious of life.

Perhaps it may be said the stones were placed there by some other means, but, the wall was five feet thick and made of many small stones, and much overgrown, so that I am satisfied they came up from the stones of peaches grown on the tree near whose root they are.

Grafton, Feb. 1, 1844. [*Mass. Ploughman.*

☞Remarkable instances have frequently been given of seeds that retain their vegetating powers for a great length of time. Wheat found in the interior chambers of the pyramids of Egypt and supposed to have lain there for three thousand years, has vegetated on being sown in a proper soil.

How long peach stones or any of that class may be preserved, we have never learned. We should not think it incredible if we should hear that these stones would vegetate after being kept dry for many years.—[Ed.

To preserve Iron from rust—Sponge the pieces to be preserved in a mixture of concentrated solution of inpure soda, (soda of commerce) one part and three parts of water. Pieces of Iron left three months in it had lost neither weight nor polish, while similar pieces immersed for five days in the simple water, were covered with rust.

Large Hogs.—A Berkshire hog, fattened by Asahel Foote, Jr. Esq., of Williamstown, was sold in Pittsfield, on Wednesday last, that weighed 709 lbs. The rough lard weighed 80 lbs., hams 104 lbs. The Sun says:

"The purchaser of this noble animal, Mr. Daniel Bodurtha, of this place, has already contracted with the Committee of Arrangements to cure the Hams for the benefit of the guests at the great Berkshire Jubilee, in September next."

Maple Sugar.—Every man who can conveniently attend to it should make maple sugar. It can be done when the farmer has but little else to do, so the labor should not be reckoned high. In some sections fuel is of but little consequence, and where it is high, strict economy should be practised as to the mode of boiling. For catching sap, birch buckets answer a temporary purpose, and the cost is a mere trifle. Troughs made of light soft wood cost but a few cents each, where timber is cheap, and they will last long, if housed, or turned upside down, in a pile, and sheltered from the sun and storms. But the most convenient and cheapest vessels in the end, are buckets with iron hoops.—*Boston Cultivator.*

Another Death from Glanders.—A wine grower at Versy, in the Aube, having a glandered horse, was giving him a drench, when the gag slipped out of his mouth, and the operator received a wound on his cheek from a tooth of the horse. The next day his face was inflamed, every symptom of glanders followed, and death soon ensued.—*Ib.*

BALTIMORE MARKET, March 5.

Beef, Balt. mess,	8½a9	Butter, Glades, No. 1,	13a		
Do. do. No. 1,	6½a7½	Do. do. 2,	7a11		
Do. prime,	5a5.50	Do. do. 3,	5a7		
Pork, mess	11	Do. Western 2,	6a		
Do. No. 1	9½a9¾	Do. do. 3,	5a6		
Do. prime	8½a8¾	Lard, Balt. kegs,	1, 6¼a7		
Do. cargo,	a	Do. do. 2,	none		
Bacon, hams, Ba. lb	6½a6¾	Do.-Western,	1, 6¼a7		
Do. middlings, "	5a5½	Do. do.	2, 5a5½		
Do. shoulders, "	4½a4½	Do. do. bls	1, 6a6½		
Do. asst'd, West.	5a	Cheese, casks,	6		
Do. hams,	6a	Do. boxes,	5a8½		
Do. middlings,	5a	Do. extra,	12a15		
Do. shoulders,	4a				
COTTON—					
Virginia,	9a10	Tennessee, lb.	0		
Upland,	10½a11½	Alabama,	11a12		
Louisiana,	11¾	Florida,	10a12		
North Carolina,	10a11	Mississippi			
LUMBER—					
Georgia Flooring	12a15	Joists & Sc'ling, W.P.	7a10		
S. Carolina do	9a11	Joists & Sc'ling, Y.P.	7a10		
White Pine, pann'l	25a27	Shingles, W. P.	2a9		
Common,	20a22	Shingles, ced'r,	3.00a9.00		
Select Cullings,	14a16	Laths, sawed,	1.25a 1.75		
Common do	8a10	Laths, split,	50a 1.00		
MOLASSES—					
Havana, 1st qu. gl	17½a20	New Orleans	24a25		
Porto Rico,	26	Guadaloupe & Mart	26a28		
English Island,		Sugar House,	28a36		
SOAP—					
Baltimore white,	12a14	North'rn, br'n & yel.	3½a4½		
brown & ylle'w	4½a5½				
TOBACCO—					
Common	2 a 3½	Yellow,	8 a10		
Brown and red,	4 a 5	Fine yellow,	12a14		
Ground leaf,	6 a 7	Virginia,	4 a 9		
Fine red	6½a 8	Rappahannock,			
Wrappery, suitable for segars,	8a13	Kentucky,	3 a		
Yellow and red,	7a10	St. Domingo,	13 a11		
PLASTER PARIS—		Cuba,	15 a38		
Cargo, pr ton cash	3.12a	Ground per bbl.	1.12a		
SUGARS—					
Hav. wh. 100lbs	9a10.50	St. Croix, 100lbs	7.00a8.00		
Do. brown	a7.50	Brazil, white,	a		
Porto Rico,	6 a7	Do. brown,			
New Orleans,	6¾a7.20	Lump, lb. c.			
FLOUR—We quote					
Superfine How. st., from stores, bl.			$4.75a		
Do. City Mills,			4.75		
Do. Susquehanna,			4 75		
Rye, first			3.25a		
Corn Meal, kiln dried, per bbl.			2.50		
Do. per hhd.			11.25		
GRAIN—					
Wheat, white, p bu	1.12	Peas, black eye,	50a		
" best Pa. red	95a100	Clover seed, store	$6a		
"ord. to pri. Md	85a98	Timothy do	2.a2.25		
Corn, white,	38a	Flaxseed, rough st.	1.30		
" yellow Md.	41a	Chop'd Rye, 100 lbs.	1.25		
Rye, Md.	54a	Ship Stuff, bus.	20a		
Oats, Md.	25a26	Brown Stuff,	15a		
Beans,	100	Shorts, bushel,	10a		
FEATHERS—per lb.			28a33		
COFFEE—					
Havana,	7 a 8	Java, lb.	10 a12		
P. Rico & Laguay.	6¾a 8	Rio,	6½a8		
St. Domingo,	5¾a 6½	Triage,	3½a 4½		
RAISINS—Malaga bunch, box,			1.80a1.90		
WOOL—					
WASHED.		UNWASHED.			
Saxony,		Saxony and Merino			
Full Merino,		Common, to ¼ blood,			
3-4 blood do.		Pulled,			
1-2 do do					
1-4 and common,					
Tub washed,					
CANDLES—					
Mould, common,	9a10	Sperm,	32a33		
Do. choice brands,	10½	Wax,	60a65		
Dipped,	8a 9				

The inspections of the week comprise 29 hhds. Md. 33 Ohio, 12 Ky. and 6 Mo.; total 80 hhds.

Wool—There is a good demand for wool, but the stock and receipts both continue light. We note a sale of a mixed lot of 3000 lbs common, half and three quarter Merino at 30 cents, and 2000lb native washed at 25a28.

Fuel—Oak wood 4a4.25, Pine 3a3.25, Hickory $5a5.50 per cord; very little on the wharves, boats having been detained until recently by the ice.

Cattle—300 head of Beef Cattle were offered at the scales Monday of which 160 were sold and the balance laid over; prices paid ranged from 1.37 to 2.44 per 100lb on the hoof as in qual. equal to $2.75a4.62 net.

Flour—Sales of Howard st. of good mixt brands from store on Saturday at 4.62. On Monday, the same price is offered, but no transact'ns. Receipt price by cars 4.50. City Mills is in limited demand, at 4.75.

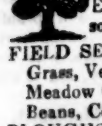
Cloverseed—holders are offering to sell at $5.75, but others firm at $6.

A lot prime red Md. wheat sold to-day at $1 per bushel. On Saturday a lot of family Flour white Wheat sold at the rate of 1.12. Sales of yellow Corn at 41c. and of white 38. Oats 25a26.

Tobacco—A good demand for almost all kinds of Maryland, but the stocks are not such as will admit of any choice, and we are therefore without transactions to note this week. Receipts of new crop Maryl'd are expected shortly. We continue former quotation—Inferior and com. 2a2.50; mid. to good 4a6; good 6.50a8, and fine 8a12. Ohio: com to mid. 3a4.50; good 5a6; fine red & wrappery 6.50a10; extra wrappery 11a13.

R. SINCLAIR, Jr. & CO.

Agricultural Implement Manufacturers, Nursery & Seedsmen, No. 60 Light street,



Offer for sale a large and superior assortment of GARDEN SEEDS, received by the recent arrivals from Europe, and from their Seed Gardens near this city. Also in store,

FIELD SEEDS, viz. red and white Clover, Trefoil, Lucerne, Ray Grass, Vetches, Herds Grass, Ky. Blue Grass, Orchard Grass, Meadow Oat Grass, Sugar Beet, Mangel Wurtzel, Cow Peas, Beans, Corn, Early Potatoes, &c.

PLOUGHS—The most prominent of which are the DOLPHIN SELF-SHARPENING & WHEEL, of late invention; Winans', Beache's, Pierce's, and Prouty & Co's self-sharpening—Sub-soil, three-furrow, Davis' and Davis' improved—Wiley's and many other valuable sorts. Also,

HARROWS and CULTIVATORS—Of many forms and patterns for cultivating Corn, Tobacco, Cotton, &c. Their stock of AGRICULTURAL MACHINERY is large and consists principally of the following, viz. Corn Mills, Corn and Cob Crushers and Shellers for manual and horse powers, Threshing Machines, Vegetable Cutters, Churns, Horse Rakes, Lime Spreaders, Sugar Mills, Rollers and Horse Scoops.

GARDEN, FARMING & HARVEST TOOLS—The assortment of these is general, and embraces all the most valuable, new and useful kinds.

BOOKS—Treating on Agriculture, Gardening, management of Stock, Poultry, Bees, &c.

FRUIT & ORNAMENTAL TRESS & PLANTS—supplied from Sinclair & Corse's Nurseries near this city, whose stock of trees and their constant personal attention to this department warrants to purchasers, articles of prime quality and 'true to marks'

☞Priced Catalogues furnished gratis, containing description of implements, directions for planting trees, management of seeds, &c.

ma 6 ROBT. SINCLAIR, Jr. & CO.

FARMERS! EXAMINE FOR YOURSELVES!

The well selected stock of Implements belonging to JAMES HUEY & CO. No 7 Bowly's wharf, Baltimore. Our stock consists of a large lot of PLOUGHS, SHEARS, POINTS, and CULTIVATORS, which we will sell low to suit the times—among which rank the economical WILEY, and the MINOR & HORTON PLOUGH of the N York composition metal and manufacture—the share has a double point and edge, equal to two shares and points. We keep on hand all kinds of PLOUGHS, premium CORN SHELLERS, HAY & STRAW CUTTERS, Corn & Cob CRUSHERS, Horse RAKES, Corn and Tobacco HOES. ☞Farmers and Planters on the Eastern and Western Shores may send their orders with confidence, as they will be attended to with promptitude. We also keep GARDEN & FIELD SEEDS. Thankful for past favors, we hope to merit a continuance of the same. Agents for the above implements,

S. L. STEER, Market st. near the corner of Paca, Baltimore.
E. & W. BISHOP, Bel-air market, Baltimore. fe 28

PLOUGHS & PLOUGH CASTINGS,

AT WHOLESALE AND RETAIL.

300 ready made PLOUGHS, and 45 tons PLOUGH CASTINGS, on hand, which have been made with great care and of the best materials.

The variety are Gideon Davis' improved Ploughs of all sizes, with both cast and wrought shares, and with intermediate sizes for cast shares onl

King's Connecticut improved by myself with wrought and cast shares; they throw a wider furrow than the Davis ploughs.

My own patent self sharpening Cleazy Plough; these I recommend as a superior plough in every respect, and easily kept in order.

Bar share and Coulter Plough, also hill-side and double mould Ploughs, together with a general assortment of Agricultural Implements, Straw Cutters, Corn Shellers, Wheat Fans, Horse Powers, Threshing Machines, &c. &c. which he will recommend to be as good as can be obtained at any other establishment in this country, and which he is selling at very reduced prices.

Also in Store, Landreth's SUPERIOR GARDEN SEEDS, a fresh supply just received.

JONATHAN S. EASTMAN,
Pratt street, between Charles and Hanover sts.
fe 28 tf

MURRAY'S CORN & COB CRUSHERS & GRINDERS.

The subscriber having so simplified the construction of the Machine, and having at the same time added to its efficiency, both for the quantity and quality of its work, is now enabled to sell for $25 Crushers of the capacity of cylinder heretofore sold at 40 dollars—Hand Crushers for 20 dollars—either with or without self-feeders. Any other machines made to order. Also, Repairs of all kinds of agricultural implements. These machines can be seen in operation opposite the Willow Grove Farm of Mr. J. Donnell.

fe 14 WM. MURRAY.

BALTIMORE CO. AGRICULTURAL SOCIETY.

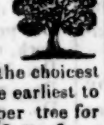
At the annual meeting of the Society held at Govanstown, on the 20th day of October, 1843, the following resolution was adopted:

"*Resolved*, That such counties of Maryland as may form societies auxiliary to this, shall on the payment of fifty dollars to the Treasurer of this society, be admitted on equal terms as regards competition for premiums, if in the opinion of the Executive Committee, such an arrangement shall appear to be expedient."

The Executive Committee at a meeting held in Baltimore, Dec. 23d, 1843, having fully concurred in the above resolution, do cordially invite the farmers of the counties of the state to form auxiliary societies, and become competitors for premiums offered by this society.

JOHN B. H. FULTON, Rec. Sec.
jan 10

PEACH AND PEAR TREES.



The subscriber is prepared to supply Peach Trees of the choicest kinds, surpassed by none in the U. States, and of the earliest to the latest kinds, which he is enabled to sell at 15 cts. per tree for 100 trees, 12½ cents per tree, for a larger number, or 20 cts. for a less number than 100; if packed an extra charge.

He can also supply a few very choice Pear Trees at 50 cts. per tree—and in the Fall will be able to furnish any quantity required of many kinds.

Catalogues furnished on application at the Farmer office. Entire reliance may be placed on the genuineness of these trees, and of their being of the choicest kinds. ap 12 S. SANDS.

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned *successors to the late firm of Bentley, Randall & Co.* are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c., to Pork Butchers for heating water for scalding hogs and for *rendering lard*, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and *soap making*, and for many other purposes for all of which they are now in *successful* operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of *two thirds*, and in many instances *fully three fourths*—numerous certificates from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, McCausland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. tf RANDALL & CO.

MARTINEAU'S IRON HORSE-POWER IMPROVED

Made less liable to get out of order, and cheaper to repair, and at less cost than any other machine.

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Threshing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order as the shorest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH,

corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 20 Pratt street. Baltimore, mar 31, 1841

FARM FOR SALE.

The subscriber is authorised by a gentleman, who, being engaged in other business, is not able to devote his whole time to farming, to sell the FARM on which he now resides, situated about 8 miles from Baltimore, near one of the best turnpike roads in the county, and having the advantage of a large stream of water passing through it, with a fine mill seat with a race ready dug and dam built. This farm contains 180 acres, more or less, having full proportion of wood, and about 70 acres well set in timothy. There is a large apple orchard in good condition, a young and thrifty peach orchard of select trees, which seldom fail to bear abundantly. The buildings are substantial and convenient, being a large brick Dwelling, rough cast, with portico back and front; a large stone Switzer barn, with extensive stabling below; milk house, smoke house, a wagon shed 120 feet front, corn house and granary, carriage house, with blacksmith shop. The farm is well enclosed and divided with good fences, a large portion of which are of stone.

The present proprietor has spared no expense within the last 3 or 4 years, in improving the soil by the most approved system of cultivation; 6000 bushels of lime have been judiciously distributed, within the last two years, the beneficial effects of which may be seen by the growing crops. It is estimated that from 100 to 125 tons of hay will be cut the coming season, and a much larger quantity the succeeding summer. The wheat and rye now growing has every appearance of making as fine a crop as any in the county.

The subscriber invites those inclined to secure a productive farm, situated in one of the richest districts of Baltimore county, remarkable for its healthiness, within an hour and a half's drive of the best market in the state, to visit this property and judge for themselves. To save unnecessary application, the terms are $16,000, one-half cash, the balance on a long credit. Apply to

SAMUEL SANDS,
Jan 10 at the office of the American Farmer.

AYRSHIRE BULL.

For sale, a young Bull, out of imported stock, one year old this spring. Price $70.

Any one having heifers of this breed to dispose of, might obtain a purchaser on application to S. SANDS, Farmer office.
Ja 17

SUPERIOR RASPBERRIES & OTHER FINE FRUIT.

The subscriber is prepared to furnish his celebrated HUISLER RASPBERRY plants at a reduced price—say at $6 per 100 plants—they are warranted genuine, and unsurpassed by any other variety known in this country.

He has also a variety of GRAPE VINES of the finest kinds, raised from cuttings.

Likewise a good supply of the large Dutch red CURRANT, and a small but very superior assortment of English GOOSEBERRIES—and a general variety of ROSES, FLOWERING SHRUBS, &c.

JOS. HEUISLER,
Ross street, near the Public School.

☞Orders can be left with Mr. S. SANDS, at the office of the American Farmer. feb 21

JAMES MURRAY'S

PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices $25, 30, 35, 40, 45.

ALSO, small MILLS, which received a certificate of merit, for $15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills. Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

☞Orders can be left with J. F. Callan, Washington, D. C.; S. Sands, Farmer office; or the subscriber,

no 8 JAS. MURRAY, Millwright, Baltimore.

GREAT IMPROVEMENT IN HUSSEY'S CORN AND COB CRUSHER.

It is believed that the Corn and Cob Crusher invented and manufactured by the subscriber in Baltimore, is taking the lead of all others. Whatever its merits may be, the machine is now pretty well known, and will still be made in its usual form, and kept for sale as heretofore.

The chief design of this advertisement is to introduce to the notice of farmers, a cheaper and in some respects a better article, which has just been completed and proved. It requires much less power, and crushes and grinds much faster than the other.

The price including extra grinders, is	$25
A machine working two sets of grinders,	35
One with three sets for water power,	45

Including extra grinders for each set, all made in a substantial manner, and warranted as advertised. As a recommendation to the late improvement a distinguished stock breeder of this vicinity assures me that it grinds faster, and with less power than my original machine, while the original is highly recommended by C. N. Bement, esq. of Three Hills Farm, near Albany, N. Y.

Orders for HEMP CUTTERS and REAPING MACHINES, should be sent to the subscriber as soon as possible, so that none who design having such machines may be disappointed at harvest time.

OBED HUSSEY.
fe 21 tf

AULT'S ENGLISH GARDEN SEEDS, &c.

Just received, our usual supply of first rate ENGLISH GARDEN SEEDS, consisting of the various kinds of Peas, Beans, Cabbage, Radish, Onion, Cucumber, Brocali, Cauliflower, Beet, Mangle Wertzel, Ruta Baga, &c. It is a fact known to every gardener of experience, that first rate English Garden Seeds produce incomparably better crops than can be raised from seeds saved in this climate. This is particularly the case with Peas, Cabbage, Cauliflower, Lettuce, &c.

As we receive most of these seeds direct from the growers, who are persons of the first respectability and experience, there is no doubt of their proving as represented. For sale, wholesale and retail, by

SAM'L AULT & SON,
Feb. 28. Corner Calvert and Water sts.

VERY SUPERIOR GARDEN SEEDS, (IMPORTED.)

The subscriber offers for sale a very superior lot of GARDEN SEEDS, imported direct from England from the best gardeners there, and warranted genuine. They comprise many varieties of Cabbage, Beet, Beans, Peas, Radish, Mangle Wurtzel, Ruta Baga, Cauliflower, Cucumber, and a variety of other kinds. Catalogues at my office.

fe 28 S. SANDT, American Farmer.

WHITE TURKIES.

A few pairs of those beautiful White Turkeys, so much admired for lawns on gentlemen's estates, for sale at this office. f 21